

1722
#3
BT
9-16-02

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants : Eric R. George
Robert L. Ballard

Serial No. : 10/011,659

Filed : November 29, 2001

For : NANOCOMPOSITE REINFORCED
POLYMER BLEND AND METHOD
FOR BLENDING THEREOF

Group : 1722

SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

Trenton, New Jersey
August 30, 2002

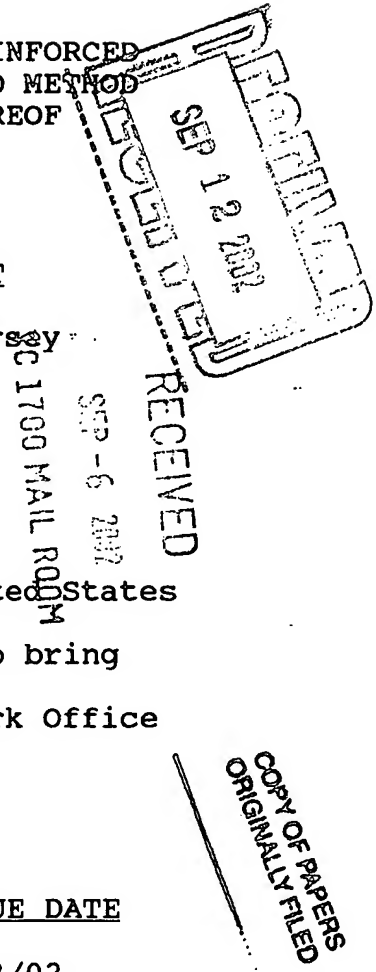
Commissioner for Patents
Washington, D.C. 20231

Sir:

Applicants have recently become aware of United States Patent No. 6,423,768 issued July 23, 2002 and wishes to bring this patent to the attention of the Patent and Trademark Office in regard to the review of the present application for patentability.

<u>PATENT NO.</u>	<u>PATENTEE</u>	<u>ISSUE DATE</u>
6,423,768	Khoury	7/23/02

United States Patent No. 6,423,768 discloses a polymer-organoclay composite composition, as well as a method for making an article made therefrom issued to F.F. Khoury and assigned to General Electric Company. This patent recently issued on July 23, 2002 by the United States Patent and Trademark Office. In view of the fact that this patent has only recently become



publicly available and applicants only became aware of it at the time of issuance, no specific government filing fee need to be paid with this Supplemental Disclosure Statement.

The Khouri patent relates to polymer-organoclay composite compositions, which include thermoplastic organic polymers bearing amine groups, an organoclay containing quaternary ammonium ions incorporating at least two alkyl or cycloalkyl groups. As a preferred embodiment, one or more additional thermoplastic polymers, impact modifying agents and compatibilizing agents may also be included. This patent claims that the polymer-organoclay composite composition has unique performance characteristics found to be closely linked to the structure of the ammonium cation present in the organoclay used, and are preferably usable for the formation of various different configurations of molded products.

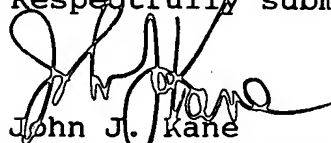
The present invention is distinguishable because in the present invention a unique composition of matter is disclosed for a nanocomposite reinforced polymer and blends produced thereof for engineering purposes, as well as a method for providing such material with mechanical properties carefully controlled. These mechanical properties can include stiffness, elasticity, tensile strength and lubricity or other mechanical properties. They can be varied by metering the polymers and nanocomposite polymers prior to the extrusion as well as during the extrusion. The extrusion process can have the parameters thereof modified to vary the resultant mechanical properties in a predictable manner. These parameters so modified may include time, temperature, as

well as overall cool-down time, as well as varying the draw-down extrusion ratio. In this manner a multi layer extrusion can be produced having mechanical properties in the final resultant nanocomposite reinforced polymer blend which are accurately controlled by varying these parameters as well as by varying the mixing proportions with pure virgin polymers and copolymers. In this manner a proprietary process is disclosed which provides a method for customizing of the mechanical properties of such a nanocomposite reinforced polymer blend to reach specific values or to reach specific evaluations within a minimal tolerance envelope as desired. In particular the process may allow certain values for mechanical properties to be achieved which may exceed the values of the individual components of the resultant polymer blend and, as such, synergistically provide a resultant polymer blend. This unique method and the composition of matter produced thereby is patentably distinct from all aspects of the disclosure of United States Patent No. 6,423,768 and, for this reason, the present invention as claimed is not deemed to be taught by the specification or claims of this patent, and for this reason, the present invention is deemed to be patentable thereover.

Furthermore, the General Electric Company does not include similar examples or property enhancers as in the present invention, and there is no discussion or teaching in regard to the use of this product for making tubing or catheters. There is no showing in the General Electric Company patent of any novel surface properties or mechanical properties as is claimed in the present invention. For this reason, the present invention is

deemed to be patentably distinguishable thereover. However,
under the rule of candor and disclosure, applicants wish to bring
this to the attention of the Examiner at this time.

Respectfully submitted,



John J. Kane
Attorney for Applicants
Reg. No. 26,921

SPERRY, ZODA & KANE
Suite D - One Highgate Drive
Trenton, New Jersey 08618
609-882-7575
FAX: 609-882-5815

I hereby certify that this correspondence was
deposited with the United States Patent and Trademark Office
first class mail in an envelope addressed to the Assistant
Commissioner For Patents
Washington, D.C. 20531

on _____

